



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,692	07/26/2001	Edward T. Buford III	27.385	7736
<div><div>759005/24/2007</div><div>Nigel L. Scott, Esquire SCOTT & YALLERY-ARTHUR 7306 Georgia Avenue, N.W. Washington, DC 20012</div></div>				
			<div>EXAMINER CHIN, RANDALL E</div>	
			<div>ART UNIT 1744</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 05/24/2007</div>	<div>DELIVERY MODE PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/912,692

Applicant(s)

BUFORD, EDWARD T.

Examiner

Randall Chin

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Upon further consideration, the Finality of the Rejection mailed 06 November 2006 is hereby withdrawn and action upon claims 17 and 19 follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart 2,876,477 (hereinafter Stewart).

The patent to Stewart discloses in Figs. 1 and 2 a brush 10 including a bristle having a "substantially rigid shaft" (merely a relative expression) and a bristle receiving body portion 14 having a plurality of said substantially rigid bristles disposed therein and wherein said body portion of said brush has a plurality of holes 16 adapted for receiving said bristles and wherein said bristles are arranged in tufts of bristles 18 wherein each of said bristles has at least one flute or groove (Figs. 3, 4, 5, 6 or 7) along the longitudinal axis of said substantially rigid shaft of each of said bristles (col. 1, lines 56-67) wherein the scrubbing action of said brush **is capable of causing** (depending on how one brushes one's teeth or how one holds/handles the brush itself) each of said bristles to bend, twist and rotate about its axis and to agitate liquid substances which

Art Unit: 1744.

are present in the area to be cleaned and wherein the bending, twisting and rotating of said bristles causes the tips of said bristles and said substantially rigid shafts of said bristles to act as cleaning surfaces (col. 1, lines 50-52) and whereby said longitudinal axis having said groove acts as an extended scraping device with respect to the surface to be cleaned (col. 1, line 68 to col. 2, line 3). It should also be noted that the entire recitation "wherein the scrubbing action of said brush causes each of said bristles to bend, twist and rotate about its axis and to agitate liquid substances which are present in the area to be cleaned and wherein the bending, twisting and rotating of said bristles causes the tips of said bristles and said substantially rigid shafts of said bristles to act as cleaning surfaces and whereby said longitudinal axis having said groove acts as an extended scraping device with respect to the surface to be cleaned" from lines 7-12 is merely functional and narrative in form adding no further structural features to the brush or bristles themselves. In any case, such functional recitation is met by Stewart as explained above. As for claim 17 reciting that each tuft consists of at least ten bristles, Stewart clearly teaches that the holes 16 are **tightly** packed and secures a "plurality of bristles" (col. 2, lines 70-72) which one of ordinary skill would find obvious to provide for "at least ten bristles" (if not already) to ensure adequate brushing and scrubbing action as well as to ensure a tightly packed tuft of bristles.

As similarly explained above, the patent to Stewart discloses in Figs. 1 and 2 with respect to claim 19 a toothbrush (col. 1, lines 15-20) including a bristle having a "substantially rigid shaft" (merely a relative expression) and a bristle receiving head portion 14 having a plurality of said substantially rigid bristles disposed therein and

Art Unit: 1744

wherein said head portion of said toothbrush has a plurality of holes 16 adapted for receiving said bristles and wherein said bristles are arranged in tufts 18 for insertion in said holes on said head portion of said toothbrush wherein each bristle of said tuft of bristles has at least one flute or groove (Figs. 3, 4, 5, 6 or 7) along the longitudinal axis of said substantially rigid shaft of each of said bristles (col. 1, lines 56-67) and wherein application of vertical and horizontal pressure in a back and forth scrubbing motion on the tip of the bristle **is capable of causing** (depending on how one brushes one's teeth or how one holds/handles the brush itself) the bristle to twist and bend and force saliva between the teeth and gums and wherein the twisting and bending of the shaft of said bristle increases the contacts between the shaft of the bristle and the surface of the teeth and gums so that said groove on said shaft of said bristle act as abrasive device to remove foreign particles lodged between and around the teeth and gums (col. 1, lines 50-52; col. 1, line 68 to col. 2, line 3). It should also be noted that the entire recitation "wherein application of vertical and horizontal pressure in a back and forth scrubbing motion on the tip of the bristle causes the bristle to twist and bend and force saliva between the teeth and gums and wherein the twisting and bending of the shaft of said bristle increases the contacts between the shaft of the bristle and the surface of the teeth and gums so that said groove on said shaft of said bristle act as abrasive device to remove foreign particles lodged between and around the teeth and gums" from lines 9-15 is merely functional and narrative in form adding no further structural features to the brush or bristles themselves. In any case, such functional recitation is met by Stewart as explained above. As for claim 19 reciting that each tuft consists of at least

Art Unit: 1744

ten bristles, Stewart clearly teaches that the holes 16 are **tightly** packed and secures a “plurality of bristles” (col. 2, lines 70-72) which one of ordinary skill would find obvious to provide for “at least ten bristles” (if not already) to ensure adequate brushing and scrubbing action as well as to ensure a tightly packed tuft of bristles.

Allowable Subject Matter

4. It is suggested to amend claims 17 and 19 by further defining the groove along the longitudinal axis of the substantially rigid shaft such that it is a **spiral** groove along the longitudinal axis of the substantially rigid shaft which is formed **within the bristle itself**.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Schiff and Poppelman are relevant to fluted or grooved bristles and Weihrauch and Firatli are relevant to helical bristles.

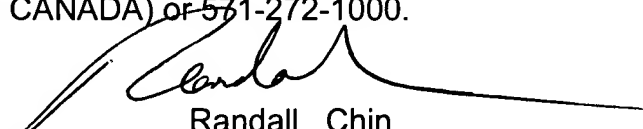
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone

Art Unit: 1744

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Randall Chin
Primary Examiner
Art Unit 1744